REMARKS

Claims 1-30 remain in the application, with the examiner indicating that claims 5, 6, 14-17, 20, 21 and 25 are withdrawn from consideration as being drawn to non-elected species. By means of the arguments presented below, it is believed that the examiner will agree that generic claim 1 should be allowed, and that thus claims 5, 6, 14-17, 20, 21 and 25 should be permitted back into consideration, and should be considered allowable along with claim 1.

In paragraph 2 of the Office action, the examiner indicated that several claims were indefinite because "the nozzle spring" did not have proper antecedent basis. By means of the amendment made to each of claims 5-7 and 14-19, each of the claims which had this recitation have been corrected.

In paragraphs 4 and 6 the examiner rejected claims 1 and 7 under 35 USC 102 as being anticipated by Nishimura, either EP 097 11 18 or US 6,102,302. These rejections are traversed for the following reasons:

First, claim 1 recites, as separate structure, the valve piston 6 and nozzle needle 14. Claim 1 includes detail regarding the end of nozzle needle cooperating with a valve piston or a thrust rod. The examiner seems to be reading element 4a of Nishimura as equivalent to the valve piston 6. In actuality, in Nishimura elements 4a and 4b are integral, and in fact are part of the nozzle needle. So the nozzle needle can not have an end which cooperates with the valve piston.

Second, the examiner indicates that the upper end of 4b in Nishimura, which he says is equivalent to applicants' nozzle needle, protrudes into the sleeve 47. But in fact, as can be seen in figure 10, the integral nozzle needle of Nishimura extends all the way through the sleeve 47, and thus cannot have the relationship between the nozzle needle and the valve piston or thrust rod, as recited in claim 1.

Moreover, Nishimura recites (at column 4, lines 37-38 of US and paragraph 18 EP) that the top end face of the nozzle needle is subjected to the pressure in the control chamber. This can clearly be seen in figure 5 of both disclosures, wherein the nozzle needle 4 is a solid piece which extends from the bottom, near 16, to its top at the chamber 10. Thus, clearly Nishimura does not have a valve piston as recited in each of the claims of this application.

In view of this teaching of an integral nozzle needle in Nishimura, and the corresponding lack of a valve piston, it is not seen how Nishimura can in any way be said to have the relationship, as recited in applicants' claims, between the valve piston and the nozzle needle. In fact, it is not seen how the examiner can read the disclosure of Nishimura to even have a valve piston.

The examiner has indicated that claims 2-4, 8-13, 18, 19, 22-24 and 26-30 are objected to, but would be allowable if rewritten to include all of the material of the claims on which they depend. This indication of allowable subject matter is appreciated.

Reconsideration and allowance of all of the claims in this application is respectfully requested.

Respectfully submitted,

Date: July 25, 2003

Ronald E. Seigg
Attorney for Applicants
Registration No. 31,517
Customer Number 02119

GREIGG & GREIGG, P.L.L.C. 1423 Powhatan Street, Suite One Alexandria, VA 22314 Tel. (703) 838-5500 Fax (703) 838-5554

REG/SLS/cle